CLAIMS

1. A transport refrigeration system for an interior space, comprising:

an evaporator coil and an evaporator fan residing within the interior space, the evaporator coil being configured for refrigerating the interior space;

an evaporator motor coupled to the evaporator fan along an axial shaft, the evaporator motor residing within an interior cavity, the interior cavity in fluid communication with an ambient environment;

a condenser coil and a condenser fan disposed adjacent to the evaporator motor;

an insulation panel that separates the evaporator motor from the evaporator fan;

at least a second insulation panel for thermally separating the interior space from a second interior cavity;

wherein the condenser coil and condenser fan reside within the second interior cavity, the second interior cavity being in fluid communication with an ambient environment;

wherein the interior cavity is not in fluid communication with the interior space;

and wherein the axial shaft extends through the insulation panel.

2. The system of claim 1, wherein the evaporator fan is configured for circulating cooled air within the interior space.

3. The system of claim 1, further comprising at least one perforated panel located between the interior cavity and the ambient environment, the at least one perforated panel being configured for causing ambient air to enter the interior cavity.

4. The system of claim 1, further comprising an insulation panel located between the interior cavity and the interior space, the insulation panel being configured for thermally separating the interior space from the interior cavity.

5. The system of claim 1, further comprising a compressor configured for conditioning a refrigerant contained therein.

6. The system of claim 5, further comprising a refrigerant line configured for circulating the refrigerant through the evaporator coil in response to the cooling of the interior space.